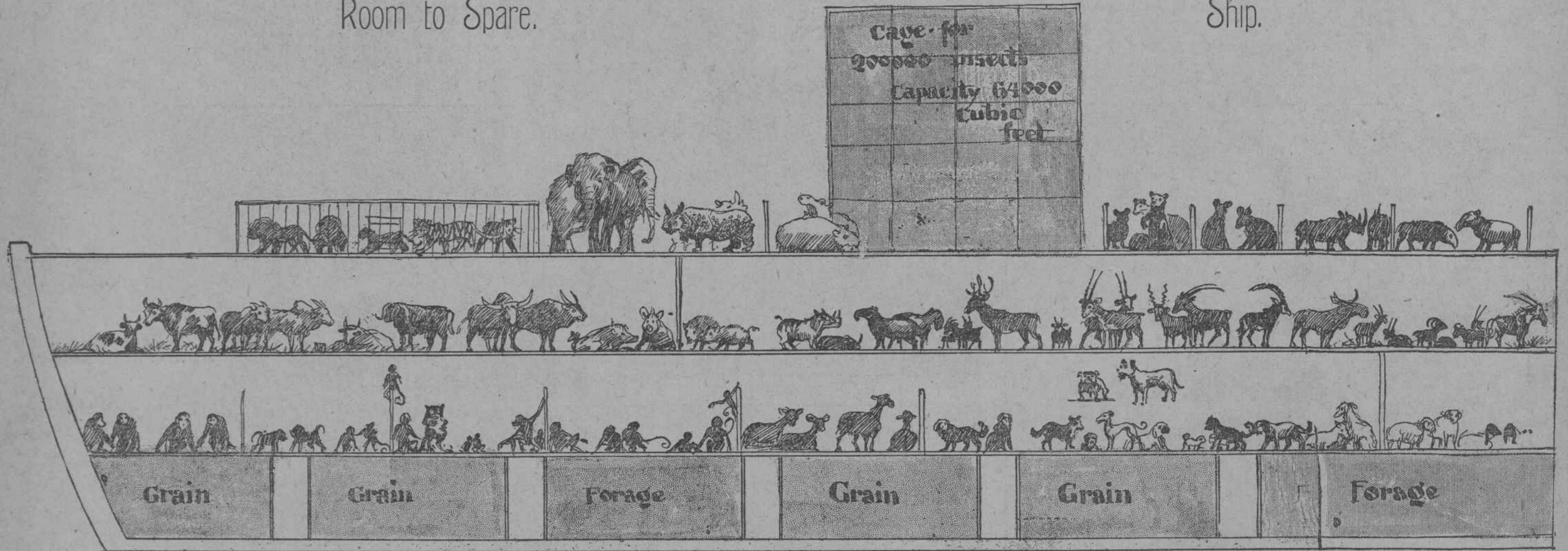


NOAH'S LARGE FAMILY OF ANIMALS IN THE ARK, AND HOW THEY MANAGED

The Biblical Measurements of the Historic Craft Show That She Could Accommodate at Least 4,900 Different Animals of All Sorts and Sizes on One Deck, with Room to Spare.

And All the Known Species of Birds and Reptiles Could Have Been Tucked Away Comfortably in Odd Corners of This Remarkable Ship.



Here's the Ground Plan of Noah's Ark, Showing How the Most Complete Menagerie Ever Gathered from the Four Quarters of the Earth Was

THE Biblical story of the ark has been almost as often a target for scoffers as has that of Jonah and the whale. There has been reason to fear that the story of the deluge and of the wonderful vessel that saved eight persons out of all mankind might suffer from the spirit of scepticism now so rampant. Already one has heard doubts expressed as to the facts in the case, and persons lacking in faith have not hesitated to declare that it was a sheer impossibility for any craft to contain all the animals alleged to have been put aboard the gigantic scow described in the Book of Genesis. It is fortunate, therefore, that this time has been chosen by an eminent Scriptural authority to come forward with evidence in support of the Bible record.

This authority is Professor Howard Osgood, D. D., of the Rochester Theological Seminary. His proofs are simple, inasmuch as he confines himself to demonstrating the fact that the ark could easily have held pairs of all the animals in the world, with food enough to support them during the period of food. He takes the measurements of the vessel, quoting them from Genesis, and sets forth his proposition in a few plain figures. The Ark, be it remembered, was 300 cubits

long, 50 cubits wide and 30 cubits high. The length of the cubit is reckoned by archaeologists at about nineteen or twenty inches. In order to be on the safe side, Professor Osgood assumes that it was eighteen inches. This estimate makes the ship 540 feet long by 75 feet wide, with a depth of 45 feet in the hold. Its plan may have been similar to that shown in the accompanying illustration, which has been made, as nearly as possible, in accordance with the idea of Professor Osgood, here presented.

The Ark would not have seemed very much larger, then, than the United States cruiser Columbia, which is 412 feet long at the load water line and 58 feet in greatest breadth. Not being designed for an ocean greyhound, Noah's ship was built in the shape of a huge scow. Its carrying capacity was therefore enormously greater than the Columbia's. As stated in the Biblical account, it had three decks, and the space on each deck must have been, approximately, 33,750 square feet. The Ark, by the way, was built of "gopher wood," which is very hard, and we are told that there was "a window" and "a door in the side."

Professor Osgood says that, though naturalists differ wide-

ly in their estimates of the number of existing species of mammals, he will take the extreme reckoning by a high authority—Wallace, author of the "Distribution of Animals." Wallace gives 2,415 species as the total—that is, 290 species above the size of the sheep, 757 from the sheep to the rat, and 1,368 of the size of rats and less. Taking two of each species, Noah would have had 4,830 individuals, to which he was required to add seven of each of the ten species of "clean" animals. This places the total of land mammals to be put in the Ark at 4,900.

In order to learn what space would be required, it is first necessary to ascertain the average size of all the mammals. There is no sort of difficulty in this, inasmuch as the measurements of the animals are well known and familiar. According to the authority of Professor Ward, the famous naturalist, of Rochester, the average size of all existing land mammals would be about that of the common house cat.

"The ocean steamers carrying cattle most carefully from America to England," says Professor Osgood, "allow twenty square feet to each ox. If we allow one-fourth of that space—five square feet, for a cat, we shall be giving a superabun-

dance of room. With this arrangement, multiplying 4,900—the number of animals—by 5, no more than 24,500 square feet of surface would be ample to contain all the known species of mammals, at the highest estimation of their number. We have seen that one deck of the Ark contained 33,750 feet. Subtract 24,500 from 33,750 and you have a remainder of 9,250 square feet. All the species, then, could be placed on one deck of the vessel and still one-third of that deck would be vacant."

Wallace estimates that there are 10,057 species of birds, 2,241 species of reptiles, and of insects about 100,000 species. "If," says Professor Osgood, "we again take the average of all these species, they could easily be placed on the 9,250 square feet not occupied by the mammals. In short, if the Ark had only one deck, two of every species of land mammals, birds, reptiles and insects could find abundant room there. But if we follow the majority of naturalists and take the number of species of mammals as only 1,700, we can put them into 17,350 square feet, with the seventy "clean" ones added, thus leaving one-half of the deck for the other creatures. Putting the Ark aside, it is plain that any of the great

ocean steamers plying between New York and Liverpool could place, with abundant room, two of each known species of land mammalia, birds, reptiles, etc., on one of her decks."

It may be proper to present the views of some other scientists who do not agree with Professor Osgood.

Dr. Theodore Gill, member of the National Academy of Science, and one of the greatest naturalists living, says that Professor Osgood's reckoning of the number of species is somewhat below the mark. There are about 3,000 known species of land mammals, 12,500 species of birds and 4,400 species of reptiles and batrachians. These are the latest estimates. Professor Osgood puts the insects at 100,000, but it is believed by the best authorities that there are not fewer than 2,000,000 species of bugs in the world. Of all animals, including mammals, reptiles, birds, fishes, insects, etc., 375,000 species are already classified more or less accurately. It is believed that the number of species existing does not fall under 2,500,000.

Dr. Gill is of the opinion that Professor Osgood's statement is a good illustration of the manner in which figures may be made to after a false showing. Anybody who has

A Bible for Gentlemen.

The most curious version of the Bible ever printed, and one which is little known, is that prepared by the Rev. Edward Harwood, D. D., an eighteenth century clergyman. He found the language of the authorized version too coarse for modern readers.

He proposed "to clothe the genuine ideas and doctrines of the Apostles with that propriety and perspicuity which they themselves, he apprehends, would have exhibited had they now lived and written in our language." While admitting that the ordinary translation had a certain "venerable sacredness," the learned Doctor opined that "an attempt to diffuse over the sacred page the elegance of modern English might allure men of cultivated minds to a book, alas! too generally neglected."

Accordingly, Nicodemus is described as "this gentleman," the convert Damaris as "a lady of distinction" and the daughter of Herodias as "a young lady who dined with inimitable grace and elegance."

The words addressed to the daughter of Jarius are, "Young lady, arise!" and St. Peter on the Mount of Transfiguration exclaims: "Oh, sir, what a delectable residence we might fix here!" This edition might well have been called the "Gentle Bible."

A SPIRIT TALK WITH ST. JOHN AND ST. JUDE, AS DESCRIBED

A PEEP into heaven and a conversation with the apostles! Such is the theme of a new writing and the author swears to it. Was there ever a more daring assertion?

Volume I. of "Primitive Christianity" has come to the Sunday Journal office from San Jose, Cal. The name of its author is Joseph Rodes Buchanan. He is a physician, an anthropologist, the originator of the theory of psychometry and a spiritualist. His book purports to report interviews obtained by him through the medium of spirits.

Dr. Buchanan is quite well known as the founder of the eclectic school of medicine. He is eighty years old, and he admits that he wrote his book under many difficulties caused by old age and infirmity. Nevertheless it is a remarkable volume and worth more than a passing notice. A devout Christian would condemn the work as blasphemous, but it must not be forgotten that spiritualism, which pervades every page of it, is a religious creed in itself.

Several years ago, says the author, he entered into correspondence with a female spirit, who adopted the name Serafina. On one occasion, by means of a medium, he wrote

a message to her which was placed on the carpeted floor under the table in broad daylight.

"In a few minutes"—these are Dr. Buchanan's words—"I picked up the letter sheet and found upon it the following pencil-written message in a bold, irregular hand:

"A Greeting Summer Land
"The Saviour of mankind has commissioned you with the greatest work yet seen or acknowledged upon earth. To you is given the great and ennobling work of establishing the spiritual faith firm, solid and secure. No, not one shall doubt the truth, the world shall bow down before it. We shall instruct you among others—proceed with thy work."
"ST. JOHN."

Shortly after this Dr. Buchanan says he received spirit communications from his wife, who had been dead a dozen years. He devotes a chapter to telling how the communications were made, but as they came in the orthodox spiritualistic fashion it is unnecessary to repeat the explanation here.

Through his spirit correspondent Dr. Buchanan says he was placed in communication with all the apostles, and, for a short time, with the Saviour himself. As St. John receives the greatest amount of space in the book, here are a few things that Dr. Buchanan says about him:

"St. John occupies so high a sphere that his return to earth is on that account more difficult, and to recall the events of earth life, with dates and chronological arrangement, as terrestrial time is foreign to the spirit world. What I have received from him in several interviews is arranged in the following report.

"St. John says that when in Rome he was carried before the Emperor at his own request that he might show that he was in no way exciting the people or creating disturbance, and that he was working in harmony with humanity, and teaching the people the doctrines of Jesus the Christ.

"He said: 'My address was delivered in an annex to the palace, and attended by about three hundred prominent people. It was listened to with attention and respect, and I was able to see that it made a deep impression on the Emperor's mind.

"In my address I merely recited the main object of my religion, and gave forth the simple teaching of the Nazarene, blending it as well as I could with the Hebrew religion, that it might not seem too antagonistic or radical.

"After this address I did hear some dissension and quibbling against my teaching from some of those who were in attendance, but from the majority I received respect and attention, and the Emperor was friendly after this interview.

"As to his Roman labors, St. John said few of the higher classes attend the service of the priests.

"The gospels of Matthew, Mark and Luke were never used in the churches, and he did not hear of them at all.

"A number of St. Paul's epistles were in circulation, and he had a copy. They were similar to the epistles now current. They did not contain the prediction of the speedy return of Jesus to bring the world to judgment before that generation passed away, nor the passages degrading women.

"When asked if he knew of the Christians hiding in the catacombs from persecution, he said that just before his arrival a body of about four hundred Christians fled to the catacombs from the hostility of the priests, for about three

days. After they came out they were not molested. Nothing of the kind occurred while he was there.

"In the church service of the priests there was something like the Catholic mass of to-day, and the doctrine of Purgatory was taught. The church services were chiefly ritual. The sermons were but short addresses teaching the people to obey the priests and conform to their worship. But the Papacy was not then established, and they did not speak of any supreme authority in the bishop of Rome.

"The missionary service of St. John at Rome, he states, lasted about a year, at Smyrna three years, at Jerusalem fifteen or sixteen. At Rome there was no Christian church or church building ready to receive him. He had to build up from the ground and overcome the opposition around him, and he continued his work, succeeding in establishing an organized Church. He gave sixteen public discourses to good audiences—but his chief work was more private and earnest with his followers. The outside opposition deterred

many from uniting; the priests endeavoring to draw the people into their own societies and keep them from him.

"In his church services there was an address to the congregation, singing and prayer, and spiritual proceedings, as described by St. Paul, generally at the close, when they were moved by the spirits to speak, to prophecy, to heal and to give utterance to foreign languages.

"Baptism by immersion was the custom—the Last Supper was regularly observed in Rome and Smyrna.

"Extracts were used chiefly from the genuine portion of St. Paul's Epistles—and from the gospel of the Hebrews. But the four gospels and Acts of the Apostles were unknown.

"The Christians in Rome knew nothing of the graves of St. Peter and St. Paul, or of any funeral when they died, attended by friends. Their remains received no more respect than common convicts. St. John was visited at Rome by the spirit of St. Paul, and at the time of the deaths of



THE SAVIOR—A PICTURE ATTRIBUTED TO ST. LUKE.



CHRIST—AFTER THE SAN CALISTO PORTRAIT.

AFTER BOSIO, ROME, 1632.